

1. (Amended) A device for controlling the direction of a radiation beam, the device comprising:-

transmission means for transmitting the radiation beam from a radiation source; and

steering means for steering the radiation beam;

wherein the transmission means comprises a body of magnetic material having a central axis which forms an aperture through which the radiation beam passes, the central axis being parallel to and coincident with the direction of the radiation beam prior to incidence on the transmission means;

and wherein the steering means causes the radiation beam to emerge from the transmission means spatially offset relative to the central axis in free space in a known direction.

2. (Amended) A device according to claim 1, wherein the beam is offset relative to the central axis and steered thereabout so as to define an angle θ between the central axis and the emergent direction.

3. (Twice Amended) A device according to claim 1, wherein the steering means comprises magnetic means.

5. (Amended) A device according to claim 4, wherein the gradient in magnetisation occupies a plane which is not perpendicular to the central axis.

6. (Twice Amended) A device according to claim 4, wherein the gradient of magnetisation rotates about the central axis.

9. (Twice Amended) A device for controlling the direction of a radiation beam, the device comprising:-

transmission means for transmitting the radiation beam from a radiation source; and

steering means for steering the radiation beam;

wherein the transmission means comprises a body of magnetic material having a central axis which forms an aperture through which the radiation beam passes, the central axis being parallel to and coincident with the direction of the radiation beam prior to incidence on the transmission means;

and wherein the steering means causes the radiation beam to emerge from the transmission means offset relative to the central axis in free space in a known direction, wherein the steering means comprises a ferrite material arranged within a solenoid so as to rotate a linearly polarised beam about the axis.

10. (Amended) A device according to claim 9, further comprising a pair of polarisers arranged adjacent either end face of the ferrite material so as to reflect or to allow the beam to pass.

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11. (Amended) A device according to claim 10, further comprising an isolator arranged to prevent a reflected portion of the beam reflected from the polarisers from entering a horn used to generate the beam.

12. (Amended) A device according to claim 11, wherein the isolator comprises an absorbing material which absorbs that portion of the beam reflected from the polarisers.

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13. (Twice Amended) A device according to claim 1, further comprising a reflective surface located adjacent a face of the body from which the beam emerges.

14. (Amended) A device according to claim 13, wherein the reflective surface comprises a cone having its apex facing the face and its central axis coincident with the central axis.

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15. (Twice Amended) A device according to claim 1, wherein the beam is swept through 360° in a plane which is perpendicular to the central axis.

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16. (*Twice Amended*) A device according to claim 1, wherein the beam comprises microwave radiation.

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20. (*Twice Amended*) A communications unit incorporating a device according to claim 1, and which includes radiation receiving means, modulation and demodulation means for modulating and demodulating information onto and from the radiation beam.